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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,102	03/26/2004	Martin Weigert	16274.159a	9738
22913 7590 05/31/2007 WORKMAN NYDEGGER (F/K/A WORKMAN NYDEGGER & SEELEY) 60 EAST SOUTH TEMPLE 1000 EAGLE GATE TOWER SALT LAKE CITY, UT 84111			EXAMINER ROJAS, OMAR R	
			ART UNIT 2874	PAPER NUMBER
			MAIL DATE 05/31/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/811,102	Applicant(s) WEIGERT ET AL.	
	Examiner Omar Rojas	Art Unit 2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on August 11, 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>Detailed Action</u> . |

DETAILED ACTION

Response to Amendment

1. With regards to the amendment filed on March 12, 2007, all the requested changes to the claims and specification have been entered. Claims 1-9 and 11-29 are pending.

Response to Arguments

2. Applicant's arguments with respect to claims 1-9 and 11-29 have been considered but are moot in view of the new ground(s) of rejection.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore:

- a. the "top surface" (claim 1) must be shown or the feature(s) canceled from the claim(s);
- b. the "optical axis of emergent light" (claims 1 and 27) must be shown or the feature(s) canceled from the claim(s);
- c. the "same optical squint angle but in substantially opposite directions" (claim 3) must be shown or the feature(s) canceled from the claim(s);
- d. the "TO package" and the "window cap" (claim 15) must be shown or the feature(s) canceled from the claim(s);
- e. the "plug-in device" (claim 20) must be shown or the feature(s) canceled from the claim(s);
- f. the "additional lens" (claim 23) must be shown or the feature(s) canceled from the claim(s); and

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- g. the "oblique end face" (claim 24) must be shown or the feature(s) canceled from the claim(s).

No new matter should be entered.

- 4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: **610**.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

- 5. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

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- The specification does not appear to mention "in substantially opposite directions" as described by claim 3 nor have applicant(s) disclosed where support can be found for this limitation.
- The specification does not appear to mention reflecting light "about 90 degrees" as described by claim 14 nor have applicant(s) disclosed where support can be found for this limitation.

Claim Rejections - 35 USC § 102

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. **Claims 1, 2, 4, 5, 8, 9, 13, 14, 25, and 27-29 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Patent No. US 6,921,214 B2 to Wilson.**

In re claims 1, 4, 8, 13, 14, 27, and 29, Wilson discloses an electrooptical module (100), comprising:

at least two electrooptical components (104A-104D) supported by a top surface of a common carrier (108) and operably coupled to an one optical waveguide (110A-110D), wherein:

the optical waveguide (110A-110D) is disposed above the top surface of the carrier (108);

the at least two electrooptical components (104A-104D) each are in an optical free-beam connection with the optical waveguide (110A-110D) by means of at least one lens (120A-120D);

an optical axis of emergent light from each of the least one lens (120A-120D) may converge so as to intersect an end of the optical waveguide at about the same point (column 4, lines 15-17);

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wherein the electrooptical module (100) inherently comprises a WDM module because it has the same physical structure to that claimed;

wherein the at least two electrooptical components (104A-104D) comprises edge-emitting lasers arranged in a row (column 2, lines 60-62), the electro optical module (100) further comprising a supporting element (106) that has reflective coating (116, shown in Fig. 2) assigned to the laser or the lasers, the supporting element (106) and the reflectively coating (116) being arranged in such a way that they reflect the light emitted by the laser or by the lasers (104A-104D) about 90 degrees onto the respectively assigned lens (column 3; lines 29-36).

Figure 1 of Wilson is reproduced below.

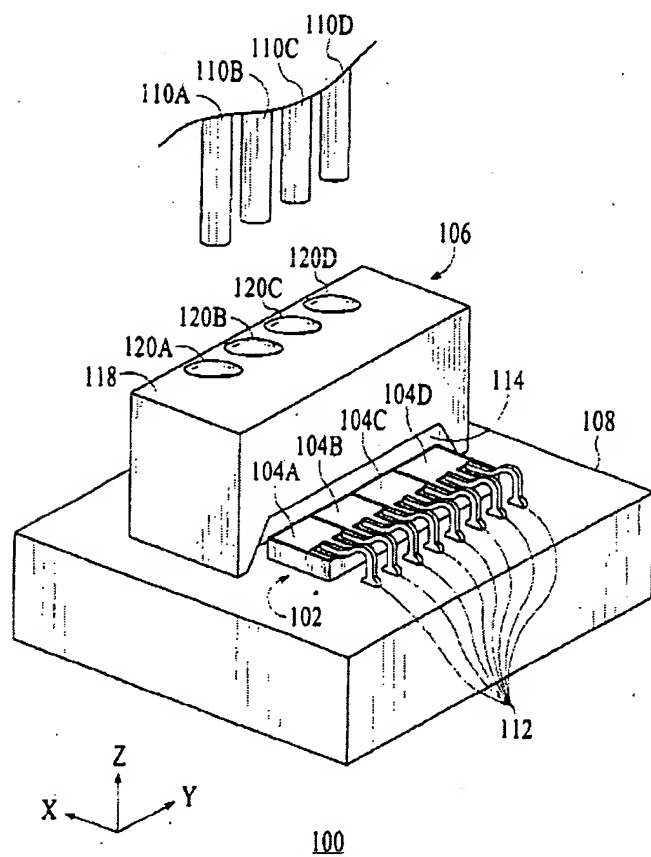


FIG. 1

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In re claim 2, the use of an "optical squint angle" for the lenses (120A-120D) is clearly suggested in Wilson's disclosure at column 4, lines 15-20 in view of Fig. 3. Furthermore, the waveguides (110A-110D) are arranged perpendicular to the top surface of carrier (108) as seen in Fig. 1.

In re claim 5, the lenses (120A-120D) are arranged on the supporting element (106) and located spatially above the electrooptical components (104A-104D) as seen in Fig. 1.

In re claims 9 and 28, the lasers (104A-104D) are inherently capable of emitting light at different wavelengths because they have the exact same physical structure to that claimed.

In re claim 25, note Fig. 3 of Wilson.

8. Claims 1-5, 8, 9, 11-13, and 25 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by US 6,731,665 B2 to Trezza ("Trezza") of record.

In re claims 1 and 8, Trezza discloses an electrooptical module (e.g., Figures 1-3), comprising:

at least two lasers supported by a common carrier and operably coupled to at least one optical fiber, wherein the optical fiber is disposed above the carrier;

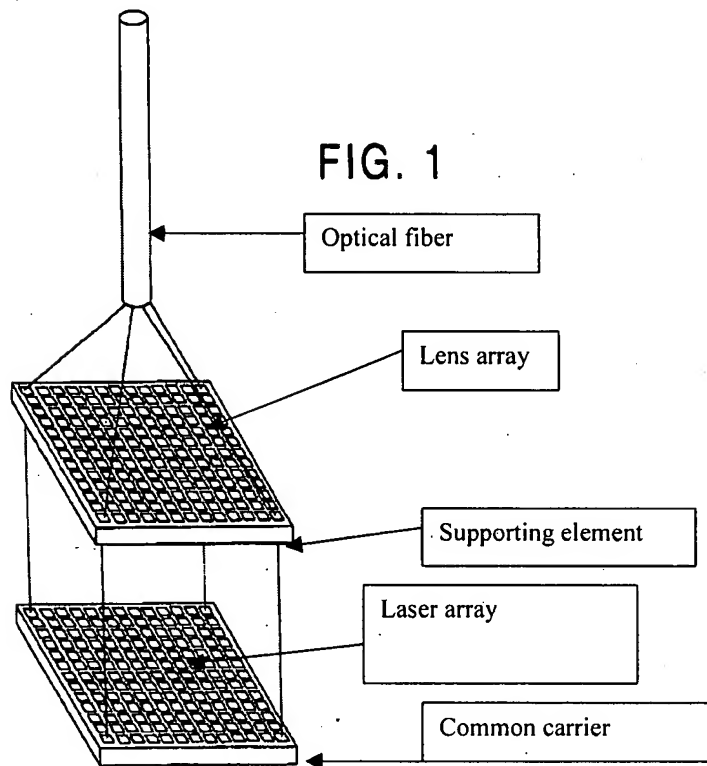
the at least two lasers are in an optical free-beam connection with the optical fiber by means of at least one lens;

all the light from each of the lenses intersects the optical fiber at about the same point;
and

wherein the electrooptical module of Trezza inherently comprises a WDM module because it has the same physical structure to that claimed. A modified Figure 1 of Trezza is

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reproduced below. Additional labeling has been provided to Figure 1 of Trezza to more clearly show the claimed features.



In re claims 2-5, 11-13, and 25, the recited limitations are clearly apparent from Trezza's disclosure at column 1, line 42 to column 2, line 21 in view of the modified Fig. 1 shown above.

In re claim 9, the lasers (104A-104D) are inherently capable of emitting light at different wavelengths because they have the exact same physical structure to that claimed.

Claim Rejections - 35 USC § 103

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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10. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson or Trezza as applied to claim 1 above, and further in view of Patent No. US 6,181,855 B1 to Richter et al. ("Richter").

In re claims 6 and 7, Wilson and Trezza both show lenses arranged on a supporting element and arranged in such a way that the lenses are located spatially over respective electrooptical components. Thus, Wilson or Trezza only differ from claims 6 and 7 in that neither reference shows arranging the electrooptical components on individual auxiliary carriers as claimed. Richter, on the other hand, discloses that arranging individual electrooptical components on auxiliary carriers is an old, traditional technique. See Richter at column 1, lines 11-21. Applicant(s) have not disclosed a benefit or perceived criticality for using individual auxiliary carriers. Using individual auxiliary carriers to mount the electrooptical components of Wilson or Trezza would have only required common sense because that was a traditional way of mounting electrooptical components as taught by Richter. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to obtain the invention specified by claims 6 and 7 in view of Wilson or Trezza combined with Richter.

11. Claims 15-22 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson as applied to claim 14 above, and further in view of Patent No. US 6,985,281 B2 to Wagner et al. ("Wagner").

In re claims 15, 16, 20, 21, 22, and 26, Wilson only differ from these claims in that Wilson does not disclose a TO package, a window cap, a ceramic substrate, an optical plug-in device, a covering cap, and an adjusting ring as claimed. Wagner, on the other hand, discloses a TO

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package (Figures 5A-11), a window cap (110/210/510/610), a ceramic substrate (112), an optical plug-in device (170/530/810), a covering cap (110/210/510/610), and an adjusting ring (172/530/810). See Wagner at columns 4, line 10 to column 9, line 35 for further details. The motivation for combining Wagner with Wilson would have been to provide protection for the electrooptical components or to provide a low-cost, small footprint package. See Wagner at column 2, lines 64-64. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to obtain the invention specified by claims 15, 16, 20, 21, 22, and 26 in view of Wilson combined with Wagner.

In re claims 17-19, because of the alternative language used in base claim 16, the limitations specified by claims 17-19 are not required by the claimed invention. Therefore, claims 17-19 are considered unpatentable over Wilson in view of Wagner for the same reasons mentioned with respect to claim 16.

12. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson as applied to claim 1 above, and further in view of Patent No. 5,455,879 to Modavis et al. ("Modavis").

In re claims 23 and 24, Wilson only differs from claims 23 and 24 in that Wilson does not teach an additional lens formed on the waveguide or an oblique end face as claimed. Modavis, on the other hand, discloses a lens/oblique end face (16/21) formed on a waveguide (10). The motivation for combining Modavis with Wilson would have been to provide improved coupling with a laser having an elliptical mode field. See Modavis at column 2, lines 19-22. Therefore, it

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would have been obvious to one of ordinary skill in the art at the time of the claimed invention to obtain the invention specified by claims 23 and 24 in view of Wilson combined with Modavis.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

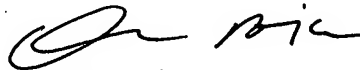
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Omar Rojas whose telephone number is (571) 272-2357. The examiner can normally be reached on Monday-Friday (9:00PM-5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rod Bovernick, can be reached on (571) 272-2344. The official facsimile number for regular and After Final communications is (571) 273-8300. The examiner's RightFAX number is (571) 273-2357.

Information regarding the status of an application may be obtained from the Patent

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Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Omar Rojas
Patent Examiner
Art Unit 2874

or

May 29, 2007



Rodney Bovernick
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